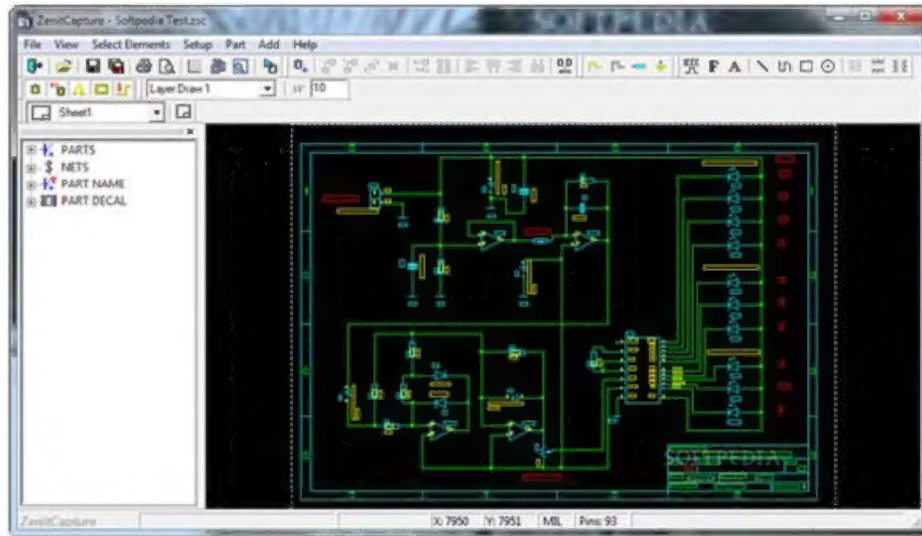




Circuit maker software, also known as Electronic Design Automation (EDA) software, is used to design and simulate electronic circuits. These tools range from simple online platforms to complex, professional-grade packages. They typically include schematic capture, PCB layout, and simulation capabilities.

Popular Circuit Maker Software Options:

EasyEDA:

A cloud-based, free EDA tool with both schematic capture and simulation features. EasyEDA is also known for its collaboration features and integration with manufacturing services.

CircuitMaker:

A free PCB design software built on Altium Designer technology, aimed at the hobbyist and maker community.

KiCad:

A free, open-source EDA suite for schematic capture and PCB layout. KiCad is known for its 3D viewer for visualizing PCB designs

Proteus:

A design suite that combines schematic capture, PCB layout, and simulation capabilities.

Altium Designer:

A professional-grade EDA tool with a comprehensive set of features for circuit design and PCB layout.

OrCAD:

A widely used EDA tool for designing and simulating PCB circuits.

EAGLE:

A popular PCB design software known for its

schematic capture, board layout, and library management features.

Autodesk Fusion:

A platform that integrates circuit design, simulation, and mechanical design.

LTspice:

A free, high-performance SPICE simulation software with schematic capture and analysis tools.

CircuitLab:

An online platform for circuit simulation and schematic capture.

DesignSpark PCB:

A free PCB design software known for its ease of use and ability to optimize the PCB design flow.

Key Features and Considerations:

Schematic Capture: The process of creating a visual representation of an electronic circuit using symbols and connections.

PCB Layout: The process of arranging components and routing traces on a printed circuit board.

Simulation: The process of modeling and analyzing circuit behavior using software.

Libraries: Collections of pre-defined components that can be used in circuit designs.

3D Viewer: A feature that allows users to visualize the physical layout of a PCB in three dimensions.

Netlist: A file that describes the connections between components in a circuit, often used for PCB layout.

SPICE: A standard simulation environment for analyzing electronic circuits.

Choosing the right software:

The best circuit maker software depends on the user's needs and experience level. For beginners, free and online options like EasyEDA or

CircuitMaker may be suitable, while professionals may prefer more advanced tools like Altium Designer or OrCAD.

By: Haytham Zeidan

Resources:

<https://play.google.com/store/apps/details?id=com.ecstudiosystems.electriccircuitstudio>

<https://easyeda.com/>

<https://www.labcenter.com/>

<https://www.myemssolutions.com/software-to-use-for-simulating-circuits/>

<https://www.altium.com/circuitmaker>

<https://circuitmaker.com/>

<https://www.kicad.org/>

<https://librepcb.org/>

<https://builtin.com/articles/largest-companies-in-dallas>

<https://www.coohom.com/article/creating-a-3d-render-of-eagle-pcb-designs>

<https://www.autodesk.com/in/solutions/circuit-design-software>

<https://resources.pcb.cadence.com/blog/2022-circuit-maker-software-from-schematic-to-simulation>

<https://www.rs-online.com/designspark/pcb-software>